

2010 CONSUMER CONFIDENCE REPORT

A Closer Look at Water Quality

Naval Support Activity South Potomac
Naval Support Facility, Indian Head, Maryland 20640-5035

- This is an annual report on the quality of water delivered by the Naval Support Facility, Indian Head (NSFIH) to our consumers at Indian Head and Stump Neck Annex. This report gives information on the source of our water, its components and the health risks associated with any contaminants.
- ♦ In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide protection for public health.
- Drinking water, including bottled water, may reasonably be expected to least contain at small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. information about More contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) visiting the EPA website www.epa.gov/OGWDW.

WATER: Today's Beverage of Choice

- In 1977, Orson Welles introduced the first bottled water TV commercial to the American consumer. Since that time, bottled water sales have increased into a \$9 billion business with the popularity of bottled water rivaling sodas as the beverage of choice. The recent introduction of "flavored or enhanced water" has become the fastest-growing segment of the bottled water industry targeting consumers involved in sports, dieting, and those who have children and want an alternative to sodas. Two of the most frequently asked questions regarding bottled water are, "Who regulates bottled water and what can be done about plastic bottle debris?"
- Under Title 26 of the Code of Federal Regulations (CFR), EPA's Office of Ground Water and Drinking Water regulates the production, distribution and quality of public drinking water (source water and tap water) and the Food and Drug Administration regulates bottled water as a food and also monitors the labeling of bottled water. Title 21 Section 165.110 of the CFR specifically regulates bottled water. These regulations include: standard of identify regulations that define different types of bottled water (i.e., mineral water, spring water, etc.); standard of quality regulations that establish allowable levels for chemical, physical, microbial, and radiological contaminants in bottled water; current Good Manufacturing Practice (cGMP) regulations for the processing and bottling of the drinking water; and labeling regulations for foods in general that also apply to bottled water. Enforcement of these regulations is accomplished through FDA inspection of bottled water plants and FDA random sampling and testing of American and foreign bottled water products.
- Knowing that tap and bottled water are enforceably regulated for safety of the consumer alleviates the concerns of consumers seeking "healthy" water. However, the problem with plastic bottle debris must be addressed through consumer awareness. Using appropriate point-of-use treatment, most tap water can be made to be of equal or higher quality and is less expensive than bottled water. And, filtering your own water and using refillable containers will help reduce plastic bottle debris in the environment.

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ENCLOSURE(/)



NSFIH continually monitors its drinking water for contaminants. This water is safe to drink; however, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline.

Safe Drinking Water Hotline - 1-800-426-4791 - www.epa.gov/OGWDW

PUBLIC NOTICE

Monitoring Violation of the Safe Drinking Water Act

Naval Support Facility Indian Head, Stump Neck Annex

On 27 Jan 2010 we became aware that our system recently failed to collect a drinking water sample. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

"We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2009 we did not complete all testing for the following contaminant and therefore cannot be sure of the quality of your drinking water during that time:"

Plant: 01 WTP - SN 12 Bldg. 2012 Well - Nitrate

State and federal regulations require us to sample for nitrates once each year at each of our wells. Our back-up well at Stump Neck Annex, well #2012, was not on-line and was not sampled during the 2009 annual nitrate sampling event.

What should I do?

There is nothing you need to do at this time.

What is being done?

A nitrate sample was taken from well #2012 on 03 Feb 2010 and sent to a state certified lab for analysis. Results of this sample showed that no nitrate was detected in well #2012. This result was sent to the Maryland Department of the Environment on 16 Mar 2010 at which time the Stump Neck water system was returned to compliance.

Additional testing will be conducted during 2010. For additional information, please contact Mary Katherine Frey at 301-744-2258 or email at mary.frey@navy.mil.

"Please share this information with all other people at Stump Neck Annex who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail."

This notice is being sent to you by NSF Indian Head - Stump Neck Annex. State Water System ID# 1080039 Date distributed: 25 May 2010

Source Water Assessment

The Maryland Department of Environment (MDE) performed a source water assessment several years ago for 25 non-transient non-community water systems in Charles County, including the NSF Indian Head Stump Neck Annex water system. The required components of this report are 1) delineation of an area that contributes water to each source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of each water supply system to contamination. For information on the Source Water Assessment report, go to

www.mde.state.md.us/Programs/WaterPrograms/WaterSupply/sourcewaterassessment/index.asp.

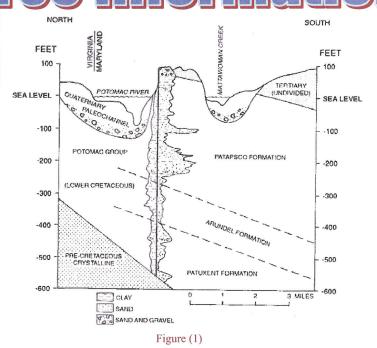


Water Source Information

- Groundwater from four Indian Head wells and two Stump Neck wells drilled to the Patapsco and Patuxent Aquifers supply the water for both NSFIH and Stump Neck Annex.
- ♦ An aquifer is an underground geologic formation of sand, gravel or rock through which water can pass and is stored. Because the layers of sand, gravel and rock provide a natural filtration, groundwater is usually clear when it is pumped out of the ground; thus, it can be disinfected without prior treatment. NSFIH wells are deep wells and are protected by these layers from most contaminants and bacteria.

• As water is pumped from the well, chlorine is added as a disinfectant to protect water from any bacteria in the distribution system. Water from all the wells then either flows into the pipes of the

.



distribution system, where it is delivered to the tap and you, the consumer, or it is directed into storage tanks and held there until needed.

WATER QUALITY MONITORING FOR 2009



The 2009 NSFIH drinking water monitoring schedule involved collecting routine monthly samples for bacteria at several sites approved by the MDE and samples

Sources

of

your drinking

water

include

the

Patapsco

and Patuxent

Aquifers.

collected annually for nitrates, total trihalomethanes (TTHM) & haloacetic acids (HAA5) (disinfection byproducts), and Phase II/V metals. MDE assisted NSFIH in 2009 by taking samples for synthetic organic chemicals, volatile organic chemicals and radionuclides. All sample results were under the maximum contaminant

- levels allowed by EPA and MDE regulations. The table below shows the substances detected in your finished water between January 1 and December 31, 2009 at both NSF Indian Head and Stump Neck Annex water systems.
- •Samples for iron exceeded Secondary Maximum Contaminant Levels (which are recommendations and not federally or state enforceable). Secondary Contaminants affect the aesthetic quality of the water and are not considered a health issue by EPA.
- Samples will be taken in 2010 for coliforms, arsenic, fluoride, nitrates, metals, disinfection by-products (TTHM and HAA5), volatile organic chemicals, synthetic organic chemicals and gross alpha particles. Any detected levels for these contaminants will appear in the 2011 Consumer Confidence Report.



WATER QUALITY DATA CHART FOR 2009 (Of contaminants sampled only the highest and most recent result is listed - if a contaminant is not detected, it is not listed.) Year **Major Source** Highest Substance Unit MCL MCLG **Tested** (Highest Level (EPA Goal) Level Detected Allowed) MICROBIOLOGICAL CONTAMINANTS 2009 Naturally present in the environment 0 positives in **Total Coliform** Samples 1 positive per 0 positive year 2009 month Bacteria DISINFECTION BYPRODUCTS 0.006 2009 Byproduct of drinking water 0.080 N/A **Total Trihalomethanes** mg/L disinfection. Range: ND -0.006 Byproduct of drinking water 2009 0.060 N/A 0.0063 Haloacetic Acids mg/L disinfection. Range: ND -0.0063 INORGANIC CONTAMINANTS 2007 Discharge of drilling wastes and Barium mg/L 2 2 0.015 metal refineries; erosion of natural deposits. 2009 Erosion from natural deposits; 4 10 Fluoride 4 mg/L Runoff from fertilizer and aluminum factories Runoff from fertilizer use; leaching 1.0 10 2009 Nitrate mg/L 10 from septic tanks, sewage; erosion of natural deposits ORGANIC CONTAMINANTS 0.0031 2007 Discharge from rubber and chemical 0 Di(2-ethylhexyl) p-0.006 mg/L factories. phthalate RADIONUCLIDES 2008 Decay of natural and man-made **Gross Beta** pCi/L 50 deposits 0 3.2 2008 Erosion of natural deposits of Gross Alpha pCi/L 15 certain minerals that are radioactive and may emit a form of radiation known as alpha radiation. Erosion of natural deposits. 5 0 0.1 2008 Radium - 226 pCi/L 2008 Erosion of natural deposits. 0 0.9 Radium - 228 pCi/L 5 0.1 2008 Erosion of natural deposits. 0 Combined Radium pCi/L 5 226 & 228 Lead and Copper in Distribution System MCL determined in the 90th Percentile Lead present in pipes and soldered 0.015 N/A 0.002 2007 Lead mg/L connections dissolves into water. Copper from pipes dissolves into 2007 mg/L 1.3 N/A 0.135 Copper water. **Secondary Contaminants** SMCLs are non-enforceable guidelines regulating contaminants that may cause cosmetic effects 2008 Erosion of natural deposits; SMCL 0.53 Iron mg/L N/A household piping 0.3 UNREGULATED CONTAMINANTS Sampling not required by Federal or State Law 2007 Erosion of natural deposits. 251 N/A N/A Radon - 222 pCi/L 2009 N/A

mg/L

Sodium

N/A

N/A

Range

67 to 110

Action Level – The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Community Water System – A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

Inorganic Chemicals - Chemical substances of mineral origin, such as lead and copper.

Maximum Contaminant Level (MCL) – The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. **Maximum Contaminant Level Goal (MCLG)** – The level of contaminant in drinking water below which there is no known or expected risk to health.

Microbiological Contaminants – Tiny organisms, such as bacteria, algae, plankton, and fungi. **mg/L** – Milligrams per liter; parts of contaminant per thousand parts of water

ND – Non-Detection. Laboratory analysis indicates the contaminate is not present.

ppm, ppb – part per million, part per billion. Measurements of the amount of contaminant per unit of water. One part per million corresponds to one minute in two years or a single penny in \$10,000 and a part per billion is like a penny in \$10,000,000.

pCi/L – picocuries per liter (a measure of radioactivity in water)

Secondary Maximum Contaminant Level (SMCL) – These levels represent reasonable goals for drinking water quality and are not federally enforceable.

Trihalomethanes (THM) – Four separate compounds (chloroform, dichlorobromomethane, dibromochloromethane, and bromoform) that form as a result of disinfection.

Ug/L - Micrograms per liter; parts of contaminant per million parts of water

Unregulated Contaminants – Substances that do not pose a threat to public health or are under consideration for further study to determine if a health risk exists.

STATEMENT ABOUT LEAD

(This statement is required by 2009 EPA promulgated revisions to the CCR)

"If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. NSFIH is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead."



For Additional Information

• For more information on the Consumer Confidence Report or water quality, please contact the persons listed.

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